

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1 (currently amended). A block encoding method, comprising steps of:

determining whether an original block of m bits is a $(2N-1)^{\text{st}}$ block of m bits, " m " and N being positive integers; and

encoding, if the original block of m bits is the $(2N-1)^{\text{st}}$ block of m bits, the original block of m bits as an A type weighted block of n bits, having a preselected number of "1" bits and "0" bits and, if otherwise, encoding the original block of m bits as a B type weighted block of n bits, having another preselected number of "1" bits and "0" bits where " n " being an odd integer larger than " m ", wherein both A type weighted block and its corresponding B type weighted block are combined to form a balance coding block in which the bit number of "1" is equal to that of "0".

2 (original). The method of claim 1, wherein the bit number " a " of bit "1" in the A type weighted block of n bits satisfies a relation $2^m < {}_nC_a$, " a " being a positive integer, and the bit number of "1" in the B type weighted block of n bits is given by " $n-a$ ".

3 (currently amended). A block decoding method, comprising steps of:

determining whether a weighted block of n bits is an A type weighted block of n bits having a preselected number of "1" bits and "0" bits, or a B type weighted block of n bits, having another preselected number of "1" bits and "0" bits, where "n" being an odd integer; and

decoding, if the weighted block of n bits is the A type weighted block of n bits, the A type weighted block of n bits as a $(2N-1)^{\text{st}}$ original block of m bits and, if otherwise, decoding the B type weighted block of n bits as a $2N^{\text{th}}$ original block of m bits, N being a positive integer and " m " being a positive integer smaller than " n ",

wherein both A type weighted block and its corresponding B type weighted block are combined to form a balance coding block in which the bit number of "1" is equal to that of "0".

4 (original). The method of claim 5, wherein the bit number " a " of "1" in the A type weighted block of n bits satisfies a relation $2^m < {}_nC_a$.

5 (currently amended). A coding/decoding apparatus, comprising:

a first buffer for outputting a digitalized image signal on a basis of an original block of m bits and generating a timing signal for notifying when the original block is outputted, " m " being a positive integer;

a first control part for determining whether the original block of m bits is a $(2N-1)^{\text{st}}$ original block of m bits, based on the timing signal, N being a positive integer;

an encoding part for encoding, if the original block of m bits is the $(2N-1)^{\text{st}}$ original block of m bits, the original block of m bits as representing an A type weighted block of n bits having a preselected number of "1" bits and "0" bits, or a B type weighted block of n bits and, if otherwise, encoding the original block of m bits as a B type weighted block of n bits having another preselected number of "1" bits and "0" bits, where "n" being an odd integer larger than "m", wherein both A type weighted block and its corresponding B type weighted block are combined to form a balance coding block in which the bit number of "1" is equal to that of "0";

a storage medium for storing the encoded block of n bits;

a second buffer for outputting the encoded block stored at the storage medium on a basis of n bits and generating a second timing signal for notifying when the encoded block is outputted;

a second control part for determining whether the encoded block of n bits is the A type block of n bits based on the second timing signal; and

a decoding part for decoding, if the encoded block of n bits is the A type block of n bits, the encoded block of n bits as the $(2N-1)^{\text{st}}$ original block of m bits and if otherwise, decoding the weighted block of n bits as the $2N^{\text{th}}$ original block

of m bits.

6 (original). The apparatus of claim 5, wherein the bit number "a" of bit "1" in the A type weighted block of n bits satisfies a relation $2^m < {}_nC_a$, "a" being a positive integer, and the bit number of "1" in the B type weighted block of n bits is given by "n-a".